

## PATENT ABSTRACTS OF JAPAN

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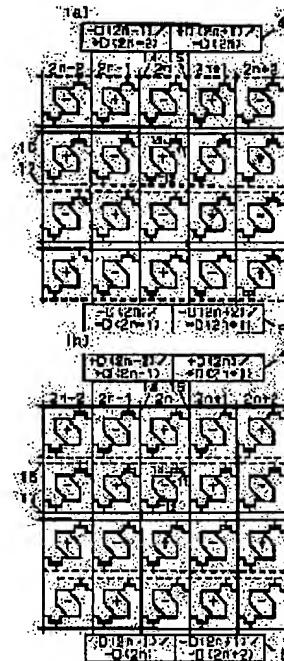
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## (54) LIQUID CRYSTAL DISPLAY DEVICE

## (57)Abstract:

**PROBLEM TO BE SOLVED:** To reduce power consumption and to lower the cost by changing over the selecting of scanning circuits by every field period and outputting alternating current picture signals whose polarities are different by every field to pixels to enable lowering the voltage of a picture signal circuit even while realizing the dot inversion and the column inversion.

**SOLUTION:** In a first field, a pixel signal having a positive polarity from a source line 15 is written in a pixel 11 by bringing a TFT 13 into conduction while impressing a scanning pulse only on a gate line 16. In a next second field, a pixel signal having a negative polarity from a source line 14 is written in the pixel 11 by the conduction of a TFT 12 while impressing a scanning pulse on a gate line 17 conversely. As a result, the pixel 11 is driven by AC. Then, a correct signal is to be written in the pixel 11 when pixel signals to be impressed on source lines are properly shifted by scanning pulses and fields. Thus, signals of source lines whose polarities are fixed are made to be alternately written in the pixel by selecting gate lines by every field in this manner.



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